

麻醉犬の大動脈，椎骨動脈，冠動脈および 腎動脈血流に及ぼすブナゾシンの効果

坂梨 又郎*，野口 克彦*，加藤 孝之*，宮本 吉昌*，
仲曾根 淳子*，竹尾 聡

Arzneimittel-Forschung 36(II)(8), 1202-1205 (1986)

Acute Effects of Bunazosin on Aortic, Vertebral, Coronary and Renal Blood Flows of Anesthetized Dogs

Matao SAKANASHI*, Katsuhiko NOGUCHI*, Takayuki KATO*, Yoshimasa MIYAMOTO*,
Junko NAKASONE*, and Satoshi TAKEO

Summary: Effects of 4-amino-2-(4-butyrylhexahydro-1H-1, 4-diazepin-1-yl)-6,7-dimethoxy-quinazoline (bunazosin, E-643, Detantol®) on aortic, vertebral, coronary and renal blood flows were investigated in anesthetized open-chest dogs. Bunazosin 1, 10 and 100 $\mu\text{g}/\text{kg}$ i.v. dose-dependently decreased aortic blood pressure (AoP) and inhibited the increase in AoP by phenylephrine 5 $\mu\text{g}/\text{kg}$ i.v. However, the increase in AoP by norepinephrine 0.5 $\mu\text{g}/\text{kg}$ i.v. remained even after bunazosin 100 $\mu\text{g}/\text{kg}$ i.v. and was almost undetectable after additional administration of yohimbine 1000 $\mu\text{g}/\text{kg}$ i.v. A hypotension by bunazosin persisted more than 15 min, but dose-dependent increases in heart rate (HR) induced by bunazosin 1, 10 and 100 $\mu\text{g}/\text{kg}$ i.v. restored within 2 min. Bunazosin 100 $\mu\text{g}/\text{kg}$ i.v. significantly but transiently increased aortic blood flow and decreased renal blood flow. Vertebral and coronary blood flows were not significantly changed. Left ventricular dP/dt was transiently increased. Calculated total peripheral vascular resistance and coronary vascular resistance were transiently but significantly decreased. No significant changes were observed in both vertebral vascular resistance and renal vascular resistance. The results indicate that bunazosin maintains the blood flows to brain, heart and kidney, and is continuously lowering AoP without significant changes in HR.

要約 4-アミノ-2-(4-ブチルヘキサヒドロ-1H, 1, 4-ジアゼピン)-6, 7-ジメトキシ
キノザロン (ブナゾシン) の麻醉犬の大動脈，椎骨動脈，冠動脈，腎動脈血流に及ぼす作用

を検討した。ブナゾシン 1~100 $\mu\text{g}/\text{kg}$ i.v. で大動脈圧の低下が起こり、心拍数は若干増加するが、この作用は2分以内で消退した。100 $\mu\text{g}/\text{kg}$ i.v. ブナゾシンは大動脈血流増加と腎血流減少を示したが、椎骨動脈や冠動脈の血流量には影響なかった。全末梢血管抵抗と冠動脈抵抗は低下した。以上の結果はブナゾシンが脳、心、腎への血流を維持し、かつ大動脈圧を低下させる作用があることを示した。

* Faculty of Medicine, University of Ryukyus. 琉球大学医学部